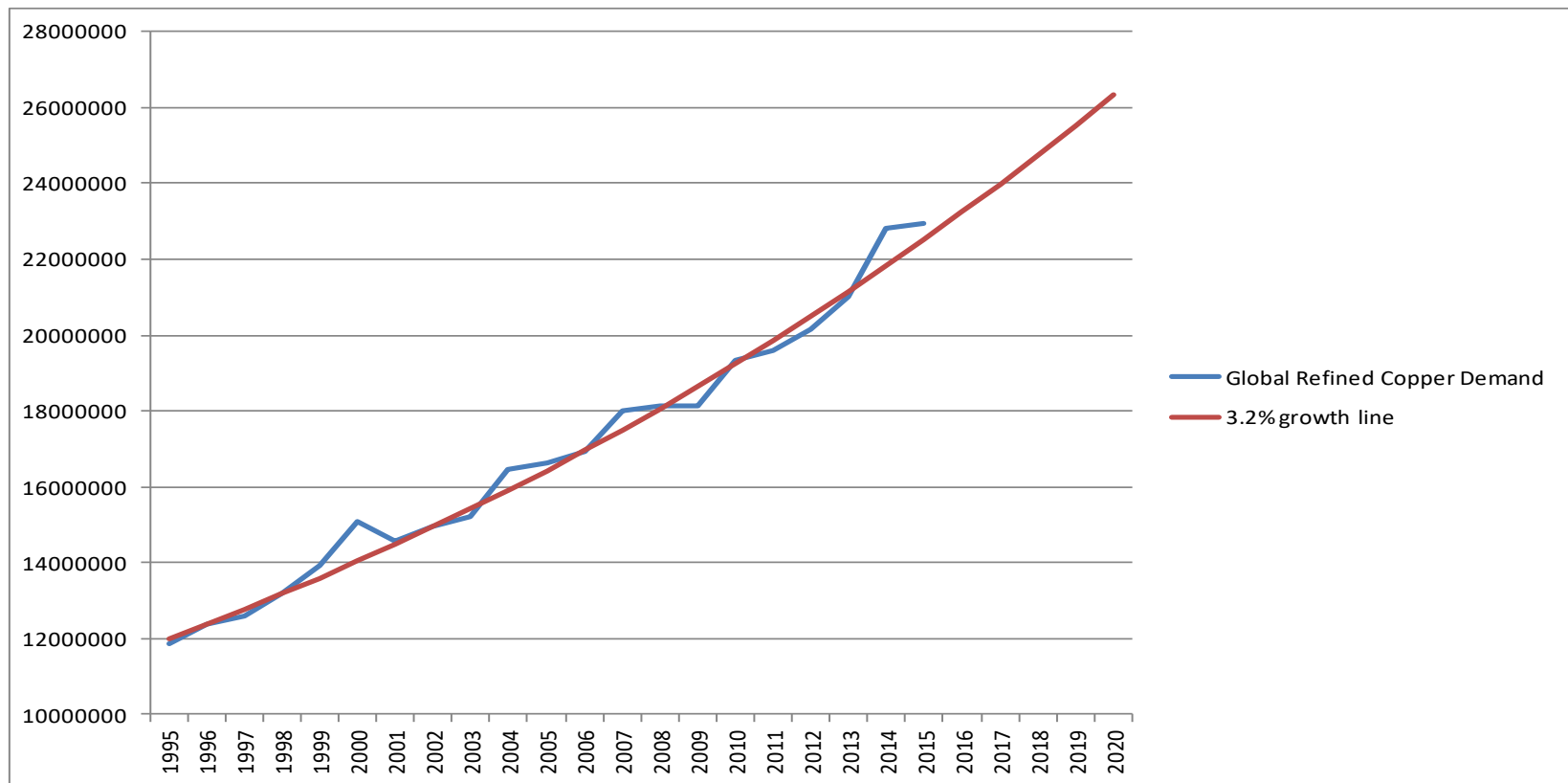




Natural Resources Day Zürich

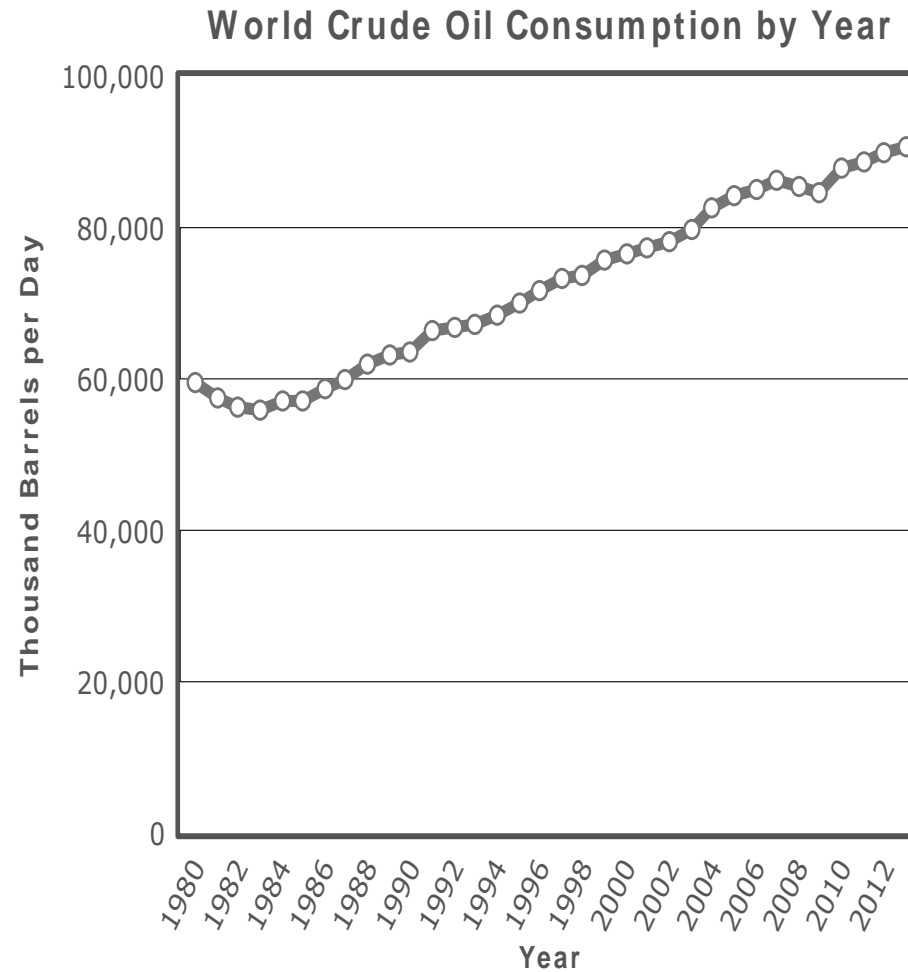
September 2019

Copper apparent demand over the past 20 years shows a trend growth of just above 3%, in line with the growth of the global economy.



Price vola of Dr. Copper is a 0 indicator for demand



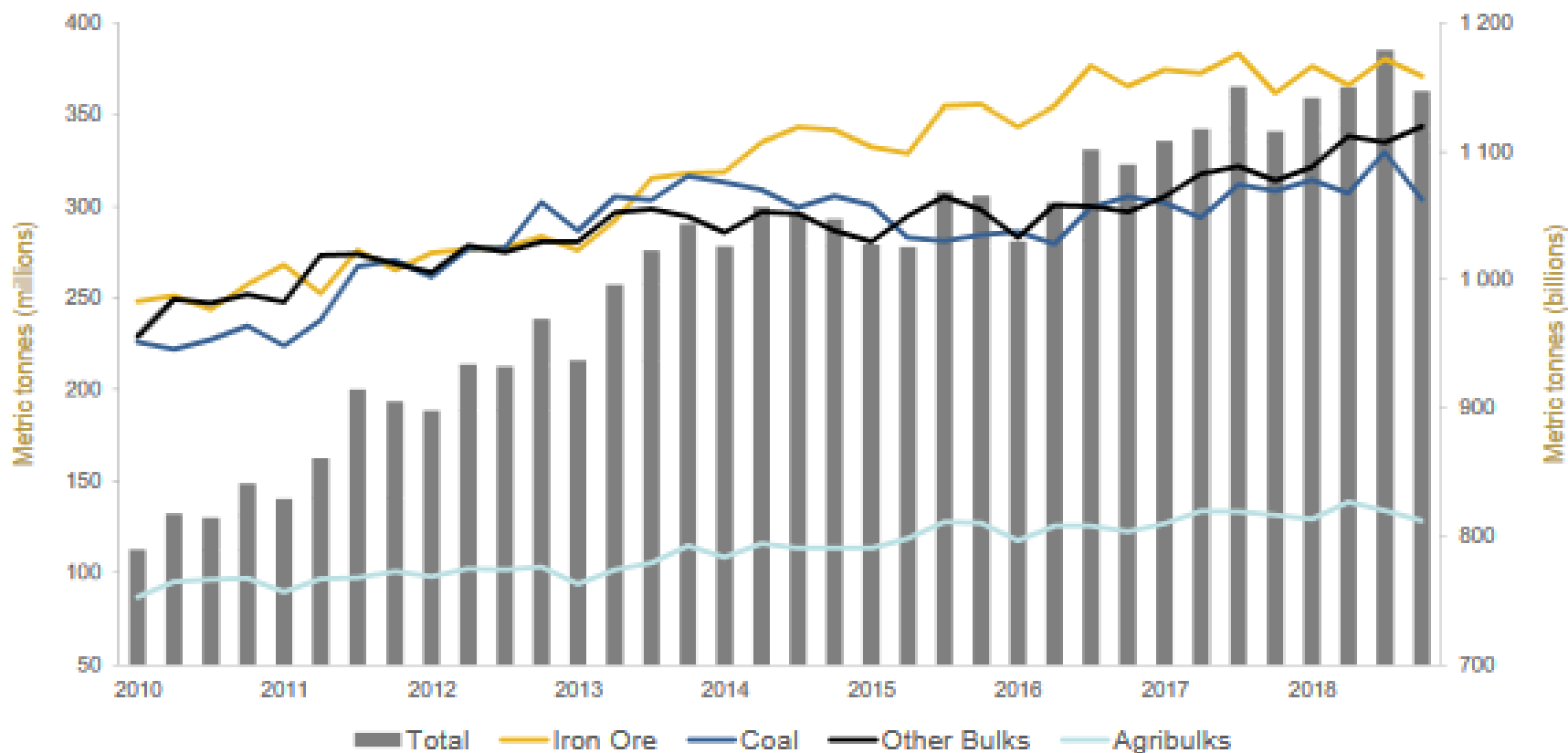


Source: United States Energy Information Administration

A good indicator for the «economy»/demand?



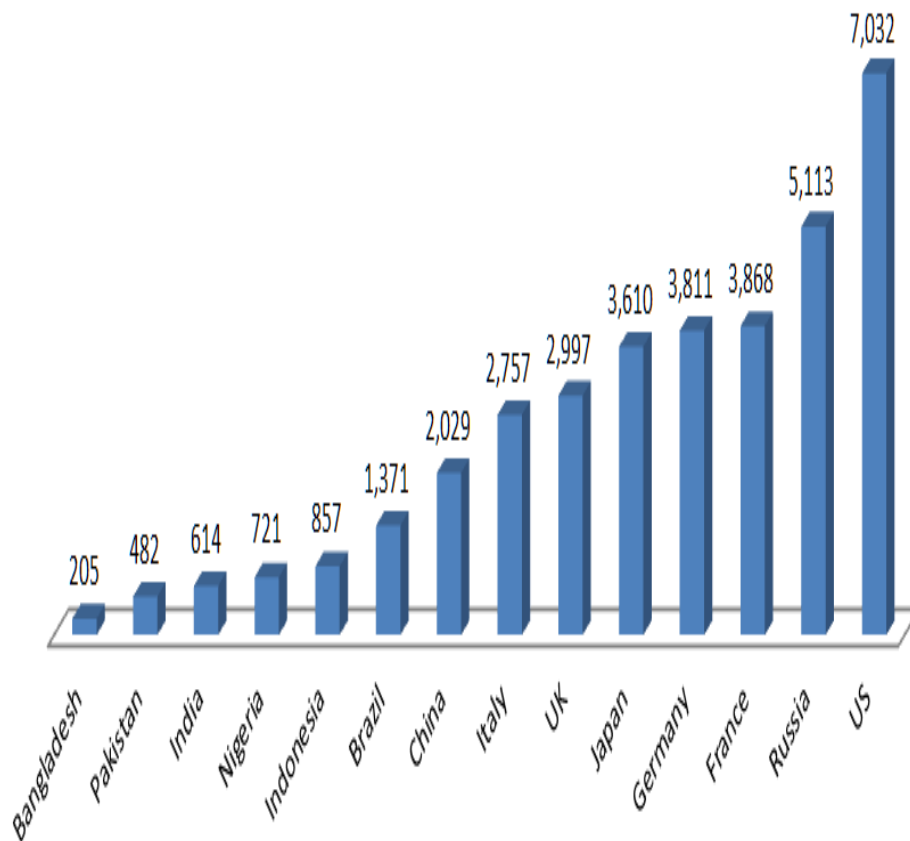
SEABORNE TRADE OF DRY BULK COMMODITIES (MAJOR IMPORTERS)



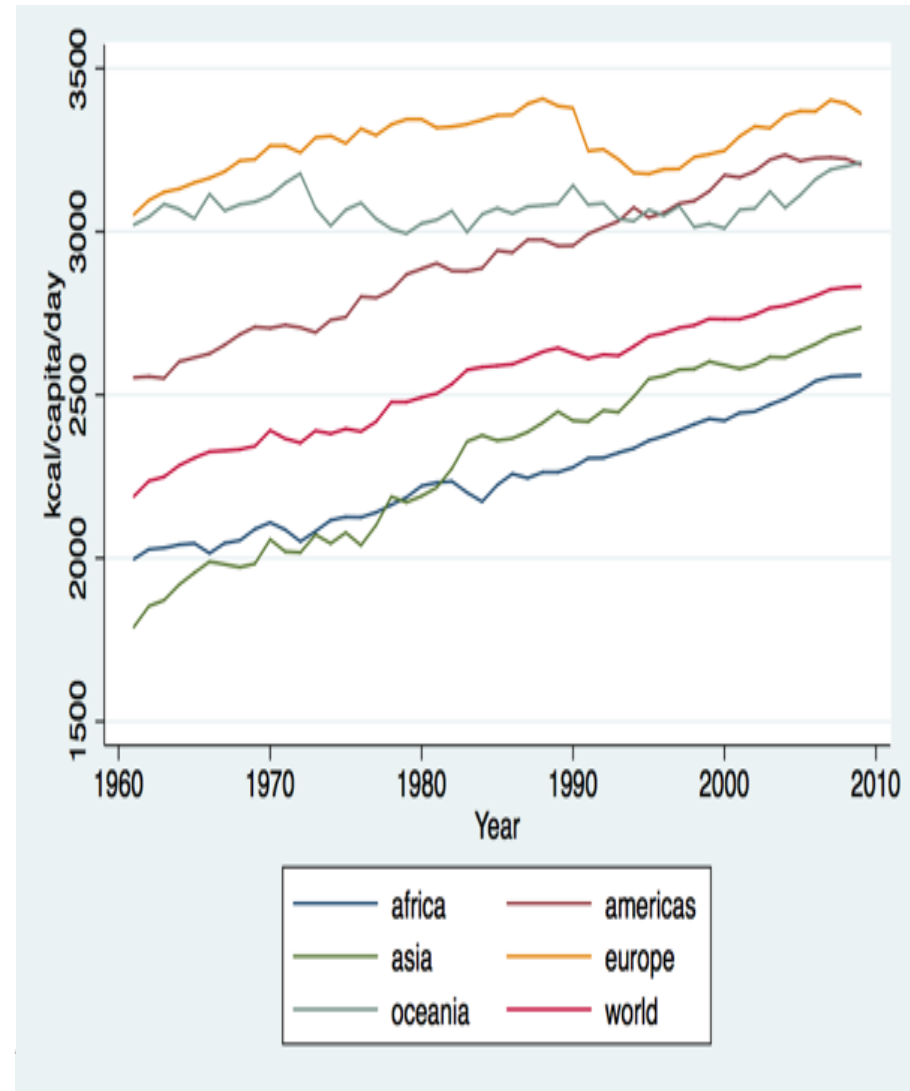
SOURCE: MARITIME ANALYTICS

Usage per capita all the same story

Energy Use per Capita



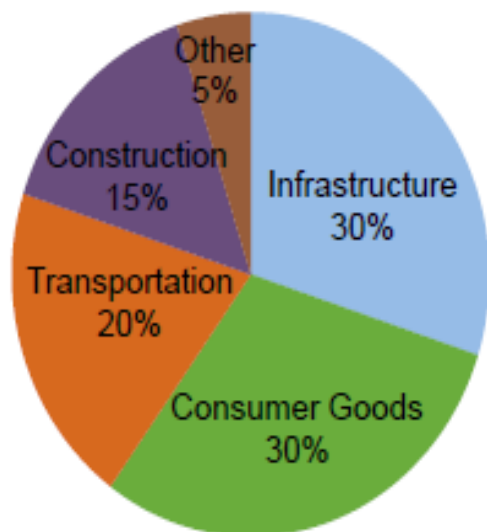
Source: Worldbank 2011



Chinese Zinc Demand to Remain Strong

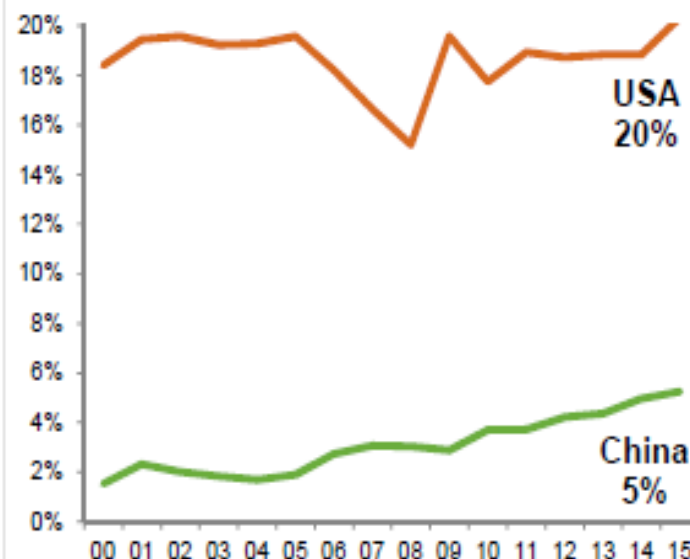
Teck

China Zinc Demand



Source: Teck

Galvanized Steel as % Crude Production



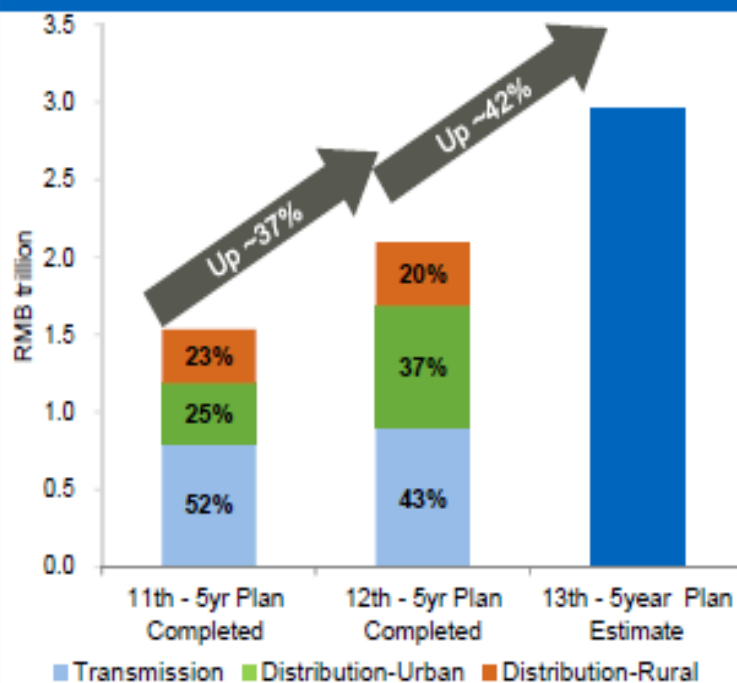
Source: Teck

If China were to galvanize crude steel at half the rate of the US using the same amount of zinc/tonne, a further 2.1 Mt would be added to global zinc consumption

Chinese Copper Demand to Remain Strong

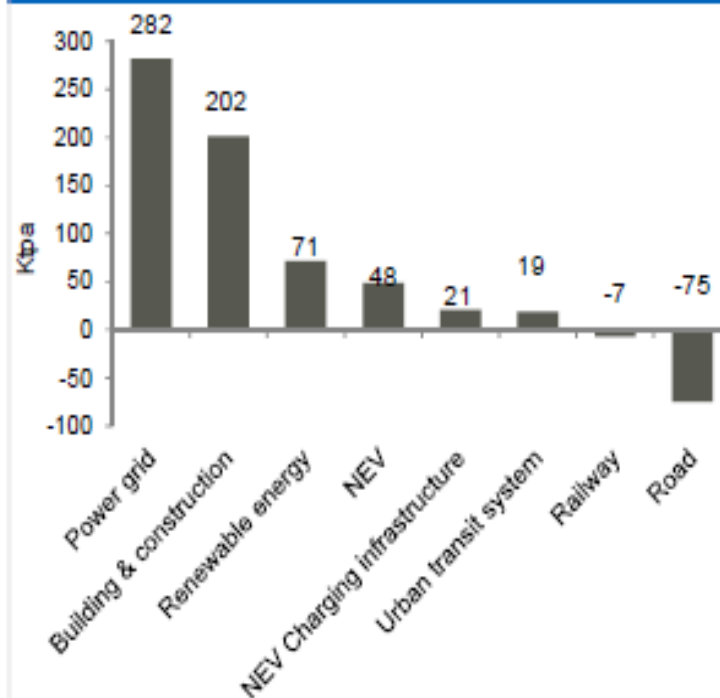
Teck

Significant Power Grid Investment



Source: CEC, ICA

Potential Annual Growth in Most Sectors

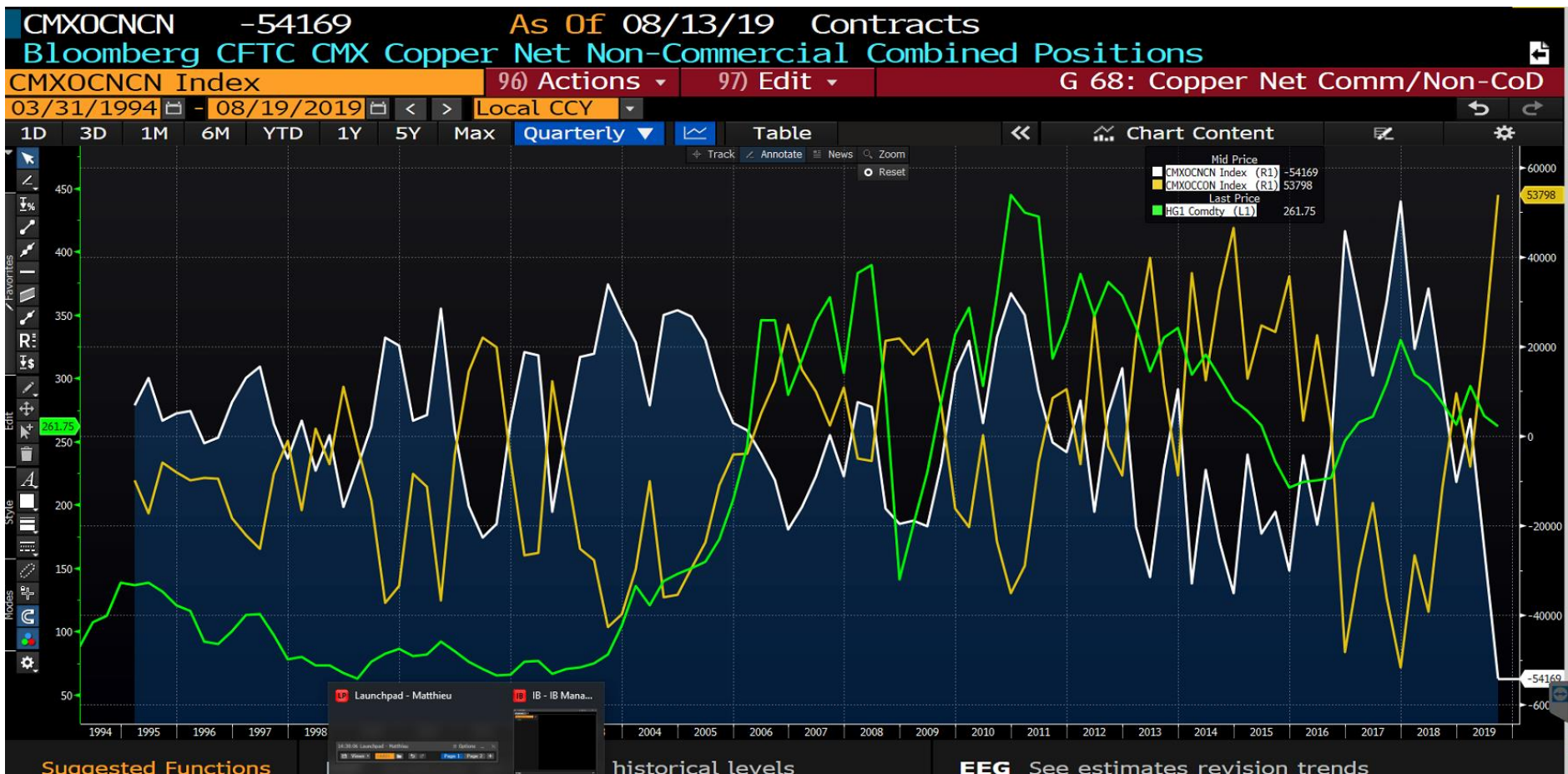


Source: NEA, ICA

Electrification of India. Any copper left for EV?

India has one of the lowest levels of copper installed per capita in the world. With a real per capita GDP of \$4,500 (in real 2005 US dollars), we calculate India has less than **14 pounds of copper** installed in its economy per person. **China, on the other hand, has nearly 170 pounds** of copper installed per person today and when China's real GDP per capita was comparable to India's (in **2004**), **we estimate it still had 45 pounds per person.** In other words, at comparable levels of real GDP, China had three times the installed copper base per capita than India. (Goehring & Rozenchwajg)





4. We welcome the strong global economic growth while recognizing it has been increasingly less synchronized between countries and some of the key risks, including financial vulnerabilities and geopolitical concerns, have partially materialized. We also note current trade issues. We reaffirm our pledge to use all policy tools to achieve strong, sustainable, balanced and inclusive growth, and safeguard against downside risks, by stepping up our dialogue and actions to enhance confidence. Monetary policy will continue to support economic activity and ensure price stability, consistent with central banks' mandates. Fiscal policy should rebuild buffers where needed, be used flexibly and be growth-friendly, while ensuring public debt is on a sustainable path. Continued implementation of structural reforms will enhance our growth potential. We reaffirm the exchange rate commitments made by the Finance Ministers and Central Bank Governors last March. We endorse the Buenos Aires Action Plan.

10. Infrastructure is a key driver of economic prosperity, sustainable development and inclusive growth. To address the persistent infrastructure financing gap, we reaffirm our commitment to attract more private capital to infrastructure investment. To achieve this, we endorse the Roadmap to Infrastructure as an Asset Class and the G20 Principles for the Infrastructure Project Preparation Phase. We are taking actions to achieve greater contractual standardization, address data gaps and improve risk mitigation instruments. In line with the Roadmap, we look forward to progress in 2019 on quality infrastructure.

<https://outlook.gihub.org/>

Global forecasts

① Investment estimates

\$79 Trillion

Investment current trends

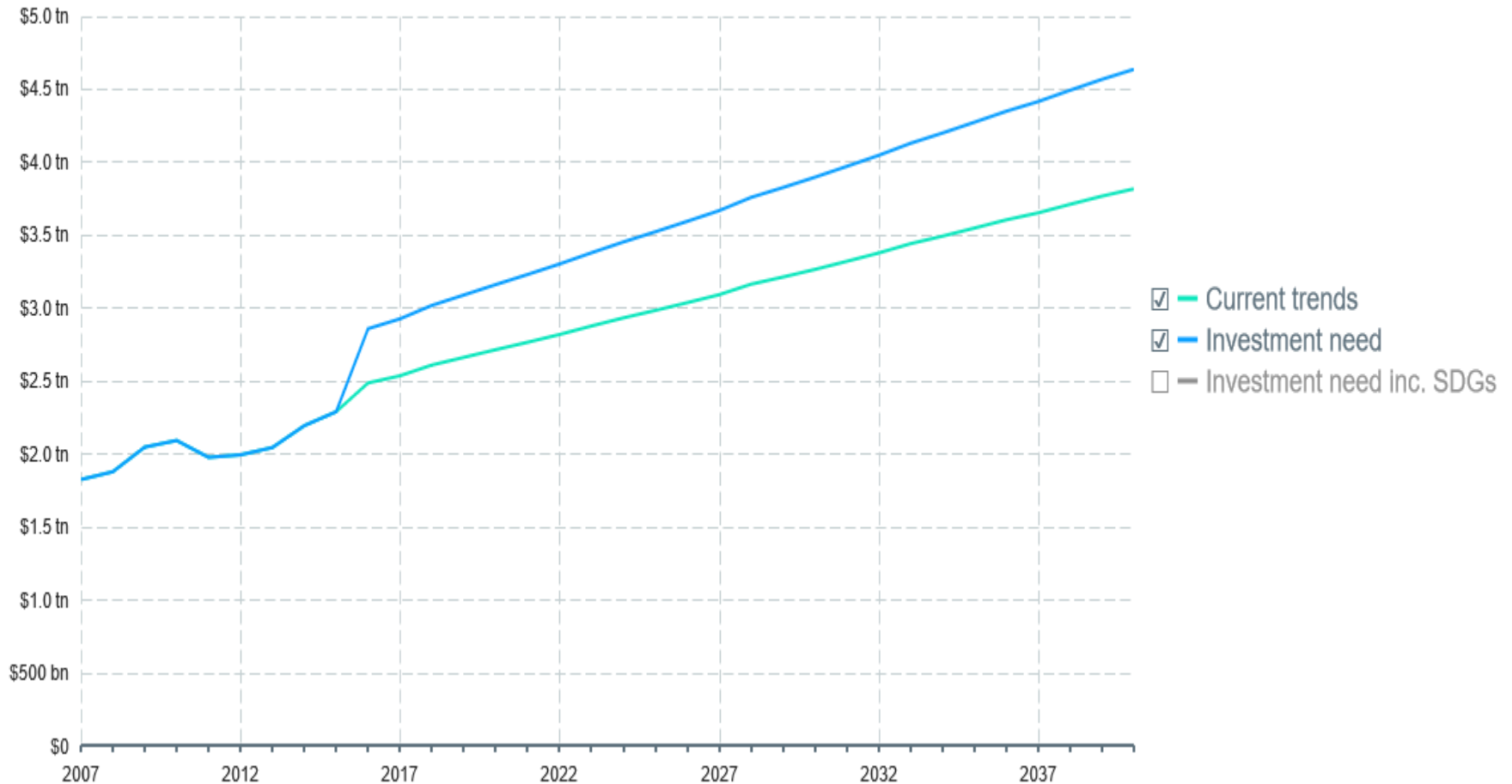
\$94 Trillion

Investment needed

\$15 Trillion

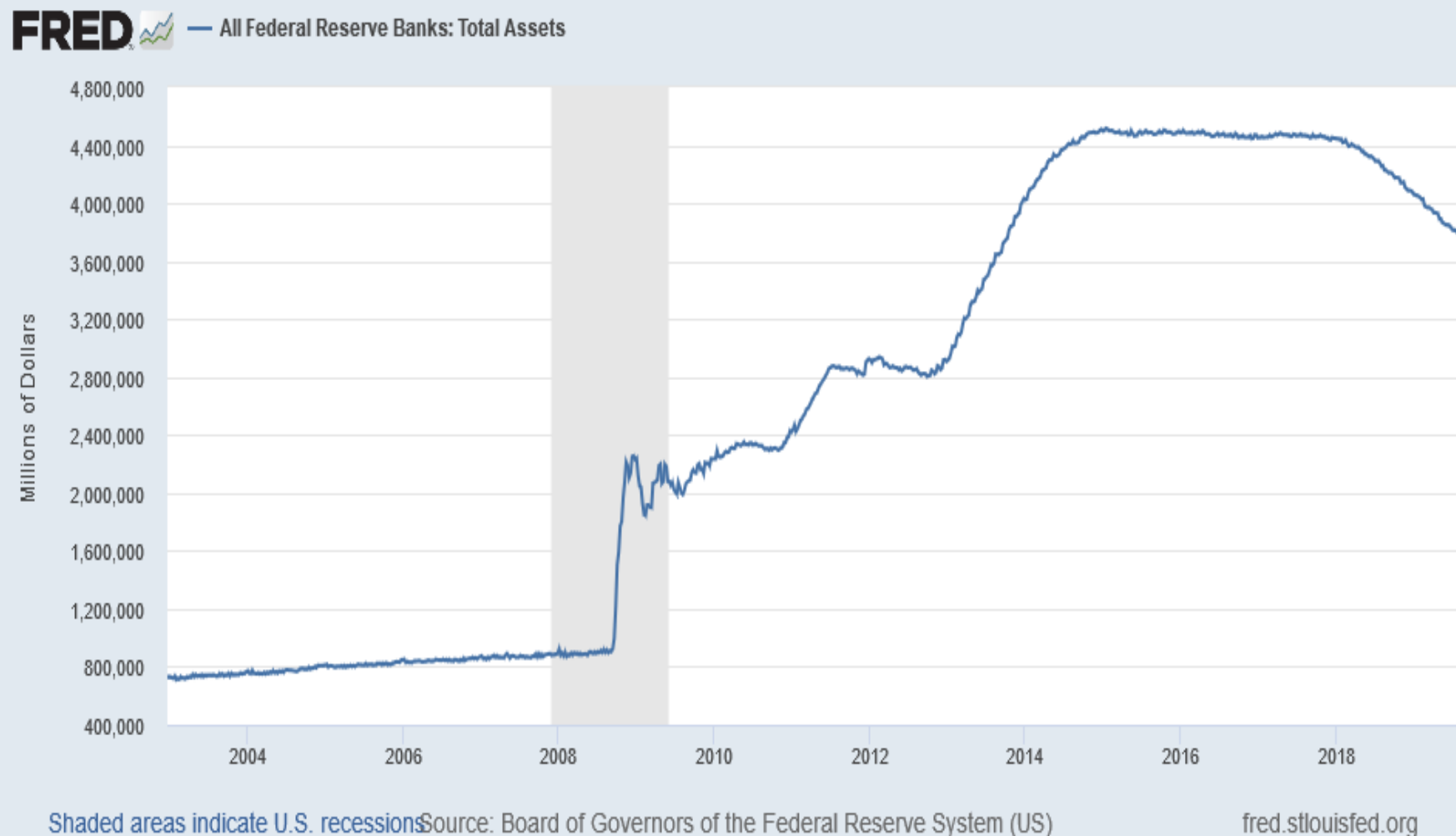
Investment gap

Infrastructure investment at current trends and need



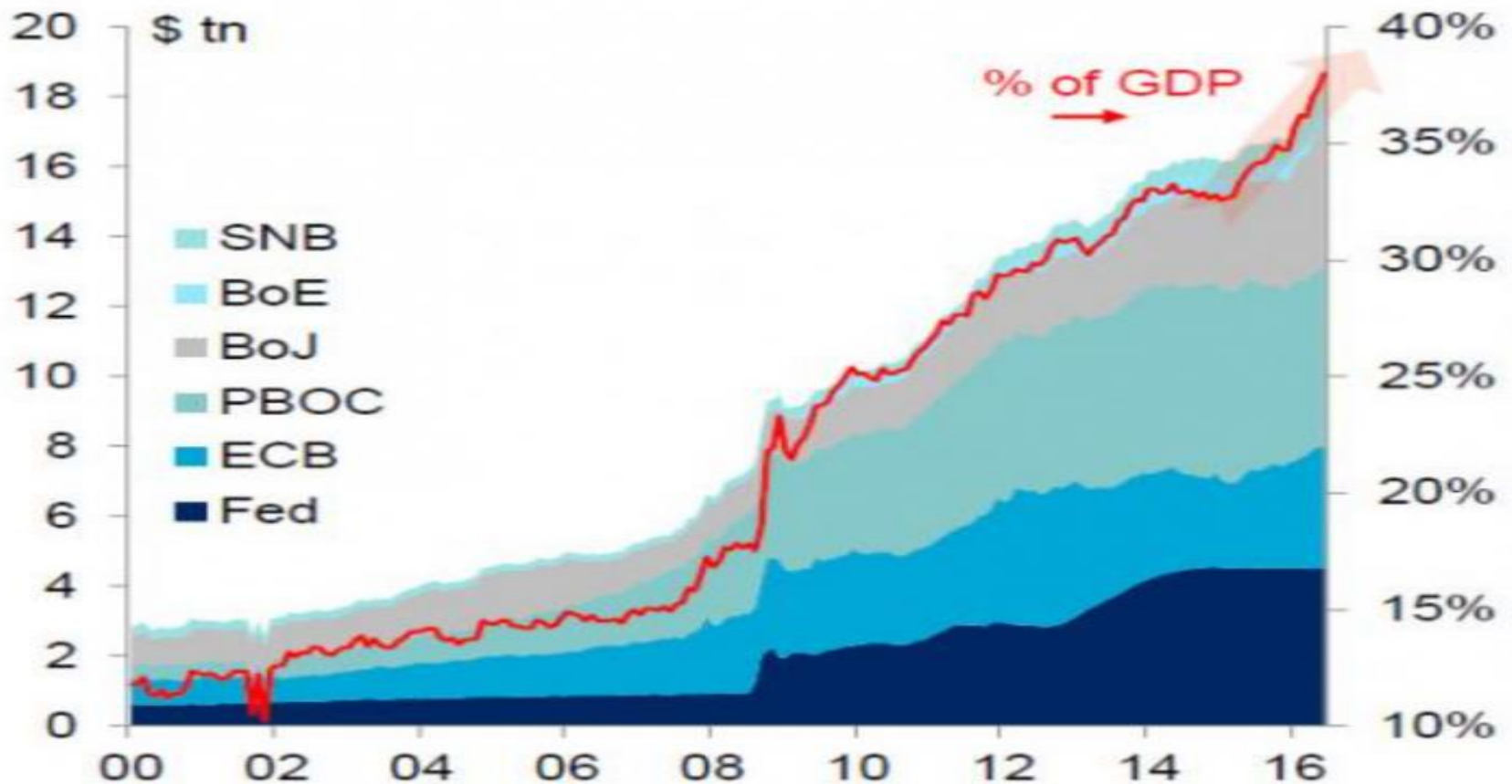
General govt gross debt % of GDP (IMF)

Japan	237.5%	China	55.4%
Italy	133.4%	Germany	56.9%
USA	106.7%	Australia	41.4%
France	99.2%	Switzerland	39.5%
Brazil	90.4%	Indonesia	29.3%
Canada	88.0%	Russia	13.8%
India	69.0%	Congo	14.0%



More and more and more!

Aggregate balance sheet of large central banks, \$tn & % of GDP



Source: Citi Research, Haver.

Examples of collateral eligible for SNB repo (list has 2500)...

ADB African Development Bank	Cote d'Ivoire	0,5	21.03.2019	21.03.2029	EUR	1.000.000.000
ADB African Development Bank	Cote d'Ivoire	0,875	24.05.2018	24.05.2028	EUR	1.250.000.000
ADB African Development Bank	Cote d'Ivoire	0,25	24.01.2017	24.01.2024	EUR	1.150.000.000
Agence Francaise de Developpement SA	France	3,125	04.10.2011	04.01.2024	EUR	1.000.000.000
Autobahn- Schnellstrassenfinanzierung	Austria	2,75	11.06.2012	11.06.2032	EUR	1.000.000.000
CADES	France	0,125	01.02.2017	25.11.2022	EUR	4.000.000.000
Corp Andina Fomento	Bolivarian Republic of Venezuela	1	10.11.2015	10.11.2020	EUR	1.100.000.000
Entwicklungsbank des Europarat	France	2,875	31.08.2011	31.08.2021	EUR	1.850.000.000
Erste Abwickl.	Germany	3,125	07.11.2018	05.11.2021	USD	1.000.000.000
ESM	Luxembourg	0,75	14.03.2017	15.03.2027	EUR	4.500.000.000
Eur Fin Stab, Luxembourg	Luxembourg	1,375	31.05.2016	31.05.2047	EUR	4.500.000.000
FMS Wertmanagement	Germany	1,375	11.09.2012	15.01.2020	EUR	2.500.000.000
OEGB - Infrastruktur AG	Austria	3,625	13.07.2011	13.07.2021	EUR	1.050.000.000
UNEDIC	France	1,25	30.05.2018	25.05.2033	EUR	2.000.000.000
UNEDIC	France	0,875	03.10.2018	25.05.2028	EUR	1.250.000.000
UNEDIC	France	1,25	28.03.2017	28.03.2027	EUR	2.250.000.000
UNEDIC	France	1,5	20.04.2017	20.04.2032	EUR	2.500.000.000
UNEDIC	France	0,125	16.01.2017	25.05.2022	EUR	1.250.000.000
UNEDIC	France	0,125	28.11.2017	25.11.2024	EUR	1.250.000.000
UNEDIC	France	0,5	20.03.2019	20.03.2029	EUR	1.500.000.000
UNEDIC	France	0,125	05.03.2015	05.03.2020	EUR	1.250.000.000
UNEDIC	France	0,25	31.03.2016	24.11.2023	EUR	1.750.000.000
UNEDIC	France	2,375	20.02.2014	25.05.2024	EUR	2.500.000.000
UNEDIC	France	1,5	16.04.2014	16.04.2021	EUR	2.150.000.000
UNEDIC	France	2,25	05.04.2013	05.04.2023	EUR	2.000.000.000
UNEDIC	France	1,25	29.05.2013	29.05.2020	EUR	1.500.000.000
UNEDIC	France	0,875	05.09.2014	25.10.2022	EUR	2.250.000.000
UNEDIC	France	0,3	04.11.2015	04.11.2021	EUR	1.000.000.000
UNEDIC	France	0,625	03.03.2016	03.03.2026	EUR	2.250.000.000
UNEDIC	France	0,625	17.02.2015	17.02.2025	EUR	3.000.000.000
UNEDIC	France	1,25	21.10.2015	21.10.2027	EUR	2.000.000.000

What the h... is UNEDIC??? (Wikipedia)

UNEDIC is the acronym of "Union nationale interprofessionnelle pour l'emploi dans l'industrie et le commerce" (*National Professional Union for Employment in Industry and Trade*). It was created in 1958. Until 2009, it was an agency of the French government which provided unemployed people with social benefits. In 2009, it was merged with the ANPE into the newly created agency **Pôle emploi**, and was turned into an independent association.

Former missions [\[edit \]](#)

The Unedic was an agency under governmental control. It was managed by the "social partners", which are both representatives of trade-unions and representatives of companies leaders. There are six trade-unions officially recognized by the government, which are CGT, CFDT, FO, CFE-CGC and CFTC, and three patronal organizations, Medef, CGPME et UPA. Representatives of both groups have equal power to manage the agency, as is the case for many other governmental agencies.

The agency used set the amount of unemployment contributions (paid by a part of salaries). It was affiliated to the Assedic agencies, which collected and paid the contributions. In 2008, it employed almost 15,000 people.

Current mission [\[edit \]](#)

On 1 January 2009, the agency turned into an association led by social partners. The government is not implicated, the agency is totally independent. However, it continues to set the amounts of social contributions and employment benefits.



Long Term Investment Fund

- 15, avenue J.F. Kennedy
- L-1855 Luxembourg
- Grand Duchy of Luxembourg

SIA Funds AG

- Alpenblickstrasse 25
- 8853 Lachen
- Switzerland

- Tel: +41 55 617 28 70
- Fax: +41 55 617 28 71

- website: www.s-i-a.ch
- e-mail: info@s-i-a.ch

LTIF (SIA) Classic, Stability A Cap, SRI and Natural Resources

- Performance up to 31.05.06 is that of the BVI-based LTIF, of which the LTIF Luxembourg is an identical successor. Previous performance is audited by Ernst & Young. Past performance is neither a guarantee nor a reliable indicator of future results. Performance data does not include the commissions and fees charged at the time of subscribing for or redeeming shares. This information has been furnished to you upon request and solely for your information and may not be reproduced or redistributed to any other person. It is not intended as an offer or solicitation with respect to the purchase or sale of shares of the Sicav. Neither the Central Administration Agent nor the Investment Manager assume any liability in the case of incorrectly reported or incomplete information. Please be aware that investment funds involve investment risks, including the possible loss of the principal amount invested. For a detailed description of the risks in relation to each share in the investment fund, please see the latest version of the prospectus, simplified prospectus, annual and semi-annual reports, which may solely be relied upon as the basis for investment decisions; these documents are available on www.s-i-a.ch or from the Central Administration Agent FundPartner Solutions (Europe) SA, 15A, avenue J.F. Kennedy, L - 1855 Luxembourg. LTIF Classic, Stability A Cap and Natural Resources (previously Global Energy Value) were approved for distribution in and from Switzerland by the Swiss Financial Market Supervisory Authority (FINMA) according to Art. 19 al. 1 of the Collective Investment Schemes Act, paying agent is Banque Pictet & Cie SA, Route des Acacias 60, 1211 Geneva 73, Switzerland. Legal representative in Switzerland is FundPartner Solutions (Suisse) SA, Route des Acacias 60, 1211 Geneva 73, Switzerland; notified to the Austrian Finanzmarktaufsicht according to §36 of the Investment Funds Act; authorised in France by the Autorité des Marchés Financiers (AMF) pursuant to Art. 411-58 of the AMF General Regulation; authorised by the German Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) according to §132 of the Investment Act; authorised in Italy by the Bank of Italy and the CONSOB according to Article 42 of Legislative Decree no. 58 of 24 February 1998; registered in the register of foreign collective investment schemes commercialized in Spain by the Comisión Nacional del Mercado de Valores (CNMV) pursuant to Art. 15 of the Law on Collective Investment Vehicles; recognised in the United Kingdom by the Financial Services Authority (FSA) as a recognised scheme within the meaning of Section 264 of the Financial Services and Markets Act 2000.